

REMARKS

Applicants respectfully request reconsideration and further examination of the present application.

I. Amendments to the Claims

Claims 1, 2, 7, 16, 17, 21-25, 27, 31, 32, 41, 42, 46, 47, 56, 57, 59, 60, 63-65, 74, 76, 79, 80, 81, 83, 95, 100, 101, 116, 121 and 122 have been amended, claims 5, 6, 35, 36, 45, 103, 104 and 123-125 have been canceled and new claims 126-131 have been added. Accordingly, upon entry of this Amendment, claims 1-4, 7-34, 37-44, 46-102, 105-122 and 126-131 will be pending.

The claims have been amended to provide greater clarity and to correct typographical errors.

In addition, independent claims 1, 31, 41, 65, 81 and 101 have been amended to more particularly claim certain preferred embodiments of the present invention. More specifically, the independent claims have been amended to recite a surfactant system comprising a surfactant component and a stabilizer. The stabilizer is present in the composition in an amount sufficient to enhance the compatibility of the surfactant component with the water-soluble pesticide (e.g., an herbicide such as glyphosate). In claims 1, 31 and 101, the stabilizer is selected from the group consisting of dimethylcocoamine, hexylamine, dimethylhexylamine, octylamine, dimethyloctylamine, dodecyltrimethylamide, C₄₋₈ trialkylamines and quaternary ammonium salts thereof. In claims 41, 65 and 81, the stabilizer comprises one or more amine compounds or quaternary ammonium salts thereof, each of which comprises an alkyl or aryl substituent having from about 4 to about 16 carbon atoms and not more than ten ethylene oxide linkages within the compound, and the weight ratio of the at least one cationic surfactant to the stabilizer is between about 1.5:1 and about 6:1. Support for these amendments may be found throughout the specification, for example, at page 13, lines 5-9; page 14, lines 19-26; page 16, lines 6-13; page 20, line 16 to page 22, line

15; and original claims 2, 32 and 103, which depended from claims 1, 31 and 101, respectively.

II. Response to Restriction and Election of Species

Applicants acknowledge, in view of the Restriction and Election of Species requirement, and their response thereto, as well as the above-noted amendments and additions to the claims, that:

- claims 1-4, 7-34, 37-44, 46-102, 105-122 and 126-131 are currently pending;
- the claims of elected Group III that are still pending (i.e., claims 7-9, 18-25, 31-34, 37-40, 47-49, 58-60, 67-69, 74-76, 84-86, 95-97, 105-107, 116-118) are currently under examination, along with independent claims 1, 41, 65, 81, and 101 and new claims 126-131, but only insofar as they read on the previously elected species;
- all other pending claims which have not been cancelled (i.e., claims 2-4, 10-17, 26-30, 42-44, 46, 50-57, 61-64, 66, 70-73, 77-80, 82, 83, 87-94, 98-100, 102, 108-115 and 119-122) are withdrawn from consideration at this time for being directed to nonelected inventions/species; and,
- upon allowance of generic claims 1, 41, 65, 81 and/or 101, all other pending claims will be entitled to consideration, in as much as (i) claims 2-4, 10-17 and 26-30 incorporate embodiments of the composition of claim 1, (ii) claims 42-44, 46, 50-57 and 61-64 incorporate embodiments of the composition of claim 41, (iii) claims 66, 70-73 and 77-80 incorporate embodiments of the composition of claim 65, (iv) claims 82, 83, 87-94 and 98-100 incorporate embodiments of the composition of claim 81, and (v)

claims 102, 108-115 and 119-122 incorporate embodiments of the composition of claim 101.

III. Rejections under 35 U.S.C. §103

Reconsideration is respectfully requested of the rejection of claims 1, 7-9, 18-25, 31-34, 37-41, 47-49, 58-60, 65, 67-69, 74-76, 81, 84-86, 95-97, 101 105-107 and 116-118 under 35 U.S.C. §103(a) as being obvious in view of the combined teachings of Jimoh (U.S. Patent No. 6,369,001) and Wright et al. (U.S. Patent No. 5,750,468).

A. *Status of U.S. Patent No. 6,369,001 as Prior Art*

It is to be noted that Applicants are currently reviewing their records in order to determine the earliest conception and reduction to practice date of the claimed invention, and thus to in turn determine the status of Jimoh (U.S. Patent No. 6,369,001) as prior art under the applicable section(s) of 35 U.S.C. §102. Accordingly, although Applicants address below the merits of the present rejection as if Jimoh is prior art for purposes of obviousness under 35 U.S.C. §103, Applicants hereby expressly reserve the right to raise this issue at a later date, upon completion of their review.

B. *Merits of the Rejection*

1. *Claims 1, 7-9, 18-25, 31-34, 37-40, 101, 105-107, 116-118, 126, 127 and 131*

Claim 1 is directed to an aqueous pesticidal concentrate microemulsion composition. As presently amended, the claimed composition comprises a water-soluble pesticide dissolved in an aqueous medium, a substantially water-immiscible organic solvent and a surfactant system comprising a surfactant component and a stabilizer. The surfactant component comprises one or more surfactants present in a concentration sufficient to provide acceptable temperature stability of the microemulsion

such that the microemulsion has a cloud point of at least about 50°C and a crystallization point not greater than about -10°C. The stabilizer comprises one or more amine compounds selected from the group consisting of dimethylcocoamine, hexylamine, dimethylhexylamine, octylamine, dimethyloctylamine, dodecyltrimethylamide, C₄₋₈ trialkylamines and quaternary ammonium salts thereof present in an amount sufficient to enhance the compatibility of the surfactant component with the pesticide. Accordingly, in relevant part, claim 1 requires that the surfactant system of the claimed composition include one or more specific amine compounds, or a quaternary ammonium salt thereof, all of which are nonalkoxylated. As noted in the present specification at, for example, page 13, lines 6-13, the addition of such compounds acts to enhance the compatibility of a cationic surfactant, or a mixture of cationic and nonionic surfactants, with a water-soluble pesticide within the claimed pesticidal composition.

Similarly, the liquid herbicidal concentrate emulsion composition and the aqueous herbicidal concentrate composition as defined in independent claims 31 and 101 as amended includes a surfactant system combining a surfactant component and a stabilizer selected from one or more of the specifically recited list of amine compounds, or a quaternary ammonium salt thereof.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. And third, the prior art reference must disclose or suggest all the claim limitations. MPEP §2142.

Neither Jimoh nor Wright et al. disclose or suggest an aqueous pesticidal or herbicidal concentrate microemulsion or emulsion composition or an aqueous herbicidal concentrate composition that comprises a surfactant system including one or more of the nonalkoxylated compounds called for in claims 1, 31 and 101. Rather, Jimoh

discloses and exemplifies the preparation and use of aqueous herbicidal concentrate compositions, which may be in the form of a microemulsion, using a combination of alkoxylated (e.g., ethoxylated) alkylamine surfactants, and optionally alkoxylated (e.g., ethoxylated) etheramine surfactants. Similarly, Wright et al. disclose and exemplify the preparation of aqueous herbicidal concentrate compositions using one, or a combination of, alkoxylated (e.g., ethoxylated) surfactants (e.g., etheramines).

In view of the foregoing, Applicants respectfully submit that a *prima facie* case of obviousness is lacking with respect to claims 1, 31 and 101 as amended since Jimoh and Wright et al., either alone or in combination, fail to disclose or suggest a pesticidal composition that comprises a surfactant system including one of the specifically recited amine or quaternary ammonium salt stabilizers. In as much as claims 7-9, 18-25, 32-34, 37-40, 105-107, 116-118, 126, 127 and 131 depend from claims 1, 31 and 101, these claims are submitted as patentable over the cited references for at least the same reason as noted with respect to the respective independent claims. Although these dependent claims may include additional patentable features, these features will not be addressed at this time in the interests of brevity.

2. *Claims 41, 47-49, 58-60, 65, 67-69, 74-76, 81, 84-86, 95-97, 128, 129 and 130*

Claim 41 is directed to an aqueous pesticidal concentrate microemulsion composition and, like claim 1, has been amended to require a water-soluble pesticide dissolved in an aqueous medium, a substantially water-immiscible organic solvent and a surfactant system comprising a surfactant component present in a concentration sufficient to provide acceptable temperature stability and a stabilizer. However, in contrast to claim 1, the surfactant component of claim 41 comprises at least one cationic surfactant and at least one nonionic surfactant, while the stabilizer comprises one or more amine compounds or quaternary ammonium salts thereof, each of which comprises an alkyl or aryl substituent having from about 4 to about 16 carbon atoms

and not more than ten ethylene oxide linkages within the compound. Furthermore, the weight ratio of the at least one cationic surfactant to the stabilizer is between about 1.5:1 and about 6:1. Accordingly, in relevant part, claim 41 calls for a surfactant system including one or more amine compounds, or quaternary ammonium salt compounds as a stabilizer, in addition to at least one cationic surfactant, and sets the weight ratio of cationic surfactant to the stabilizer within the specified range. As noted above, the addition of a stabilizer acts to enhance the compatibility of a cationic surfactant, or a mixture of cationic and nonionic surfactants, with a water-soluble pesticide within the claimed composition. Furthermore, the specification further notes, for example, at page 22, lines 13-16, that the recited cationic surfactant to stabilizer weight ratio is especially preferred in, for example, high load formulations.

Similarly, the herbicidal concentrate compositions as defined in independent claims 65 and 81 as amended include a surfactant system combining a cationic surfactant-containing surfactant component and one or more amine compounds or quaternary ammonium salt stabilizers in a weight ratio between about 1.5:1 and about 6:1.

Neither Jimoh nor Wright et al. disclose or suggest an aqueous pesticidal or herbicidal concentrate microemulsion composition which comprises a surfactant system combining a cationic surfactant and an amine or quaternary ammonium salt compound in a weight ratio of about 1.5:1 to about 6:1. Although, Jimoh discloses and exemplifies the preparation and use of an aqueous herbicidal concentrate composition in the form of a microemulsion that comprises a cationic surfactant and an amine (see, for example, polyoxyethylene (5) tallowamine and polyoxyethylene (2) tallowamine, respectively, or vice versa, in the Examples), the weight ratios of these are consistently approximately 1:1. Jimoh makes no other reference, either explicitly or implicitly, to such a weight ratio. Significantly, Jimoh fails recognize the benefit of enhancing the compatibility of a surfactant component with a pesticide using the claimed stabilizers such that there is no basis upon which one skilled in the art might be motivated to

modify or optimize the disclosure in the Examples and ascertain the importance of having the cationic surfactant in substantial excess relative to the amine or quaternary ammonium salt compound as called for in claims 41, 65 and 81.

Wright et al. disclose and exemplify the preparation and use of an aqueous herbicidal concentrate composition. However, the compositions prepared by Wright et al. include either a single, cationic surfactant, or a combination of a cationic and a nonionic surfactant. Accordingly, Wright et al. fail to disclose or suggest a composition which comprise a cationic surfactant component and stabilizer as set forth in claims 41, 65 and 81. Wright et al. also make no reference to the compatibility enhancing feature of the claimed amine or quaternary ammonium salt stabilizers, or the importance of having the cationic surfactant in substantial excess relative to the amine or quaternary ammonium salt compound as claimed.

In view of the foregoing, Applicants respectfully submit that a *prima facie* case of obviousness is lacking with respect to claims 41, 65 and 81 as amended since Jimoh and Wright et al., either alone or in combination, fail to disclose or suggest a pesticidal composition which comprises a surfactant system including a cationic surfactant component and an amine or quaternary ammonium salt stabilizer in a weight ratio of about 1.5:1 to about 6:1. In as much as claims 47-49, 58-60, 67-69, 74-76, 84-86, 95-97, 128, 129 and 130 depend from claims 41, 65 and 81, these claims are submitted as patentable over the cited references for at least the same reason as noted with respect to the respective independent claims.

CONCLUSION

Favorable reconsideration and allowance of all pending claims are respectfully solicited.

Applicants request an extension of time to and including March 24, 2004 for filing a response to the above-mentioned Office action.

A check in the amount of \$950.00 in payment of the applicable extension fee is

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* enclosed. In light of the cancellation of claims 5, 6, 35, 36, 45, 103, 104 and 123-125, no excess claim fees are believed to be due in connection with new claims 126-131.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to Deposit Account No. 19-1345.

Respectfully submitted,

A handwritten signature in black ink, reading "Vincent M. Keil". The signature is fluid and cursive, with the first name "Vincent" and last name "Keil" clearly legible.

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